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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,594	04/28/2000	Samuel N. Zellner	BS99-185	3133

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EXAMINER

PHAN, MAN U

ART UNIT PAPER NUMBER

2665

DATE MAILED: 02/24/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/559,594

Applicant(s)  
Zellner et al.

Examiner  
Man Phan

Art Unit  
2665



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 5, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21, 22, 24-30, and 32-47 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☒ Claim(s) 30, 32-35, and 38-47 is/are allowed.
- 6) ☒ Claim(s) 1-19, 21, 22, 24-29, 36, and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Dec 5, 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

**DETAILED ACTION**

1. This communication is in response to applicant's 12/05/2003 Amendment in the application of Zellner et al. for the "System and Method for dynamic allocation of capacity on wireless networks" filed 04/28/2000. This application is a continuation in part of Application No. 08/903,534 filed on July 30, 1997 is now US Patent 6,069,882. The amendment and response have been entered and made of record. Claims 20, 23, 31 have been canceled per applicant's request, and claims 14, 21, 30, 32, 38 and 43 have been amended. Claims 1-19, 21-22, 24-30 and 32-47 are pending in the application.

***Remarks***

2. Applicant's amendment and response with regard to the rejection under 35 U.S.C.103 are persuasive. Furthermore, the rejections of record under 35 U.S.C. § 103 of the claims are withdrawn in view of the newly discovered reference to Chuah (US#6,226,277). Accordingly, This action is made Non-Final. Rejections based on the newly cited reference follows.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joseph et al. (US#5,574,977) in view of Chuah (US#6,226,277).

With respect to claims 1-6 and 9-13, both Joseph et al. (US#5,574,977) and Chuah (US#6,226,977) disclose method and system for scheduling transmission of transactions based on priority level of a call in wireless communications according to the essential features of the claims. Joseph discloses a system and method for providing priority access and channel assignment (PACA) to designated subscribers. A system for providing a mobile telephone user with priority access to a cellular telecommunications network having a plurality of subscribers, and assigning channels to the user on a priority basis when there is channel congestion in the network (*scheduling transmissions of transactions when all of the plurality of access links are occupied*). The system comprises

means for determining a priority level for the user and the plurality of subscribers, means for determining a level of channel congestion, means for reserving a bank of channels, means for queuing call requests from the user and the plurality of subscribers, and means for selectively assigning a reserved channel to the user, or queuing a call request from the user with call requests from the plurality of subscribers, while awaiting an available channel (See Figs 4A & B; Col. 2, lines 53 plus). It's noted that the priority access and channel assignment feature in communications is well known in the art and is described in detail in "TIA/EIA/IS-53- A Cellular Features Description", in which the calls from the mobile communication devices are prioritized. The base station distinguished between a regular or high priority subscriber. The base station may also distinguish between a regular, high or low priority call. As the volume of calls increases on wireless networks and the cost for providing a wireless service decreases, the feature of prioritizing calls becomes more and more important to wireless service providers and the users.

In the same field of endeavor, Chuah discloses a method for controlling admission of remote hosts to a base station based on usage priorities (*access control manager for scheduling transmission transactions*). If there are two user priority classes, class 1 and class 2, the system admits a threshold number of remote hosts of lower priority class 2 and a maximum total number of remote hosts. When a base station receives a connection request from a new user of class 1 (higher priority), if the current total number of admitted users is less than the maximum allowable (capacity of the cell site), the new user of class 1 (high priority) is admitted, otherwise, the base station checks to see if any class 2 (lower priority) users are currently admitted and allow disconnection. If so, the base

station disconnects a class 2 user (low priority) and admits the new class 1 user (high priority). In one embodiment, the base station disconnects the "least recently used" admitted class 2 user that allows disconnection (See Fig. 22; Col. 4, lines 48 plus).

Regarding claims 7-8, Joseph further discloses in Fig. 1 a message flow diagram, in which the mobile station is not yet known to the serving MSC. The serving MSC 21 then sends a profile request (PROFREQ) message 22 to the serving VLR 18 to obtain the service profile 23 of the subscriber associated with the called mobile station. The subscriber's service profile 23 is returned to the serving MSC 21 and includes default PACA information (*default priority access level*) (Col. 4, lines 60 plus).

Regarding claims 26-29 and 36-37, they are method claims corresponding to the claims 1-13 above. Therefore, claims 26-29 and 36-37 are analyzed and rejected as previously discussed with respect to claims 1-13 above.

One skilled in the art would have recognized the need for effectively and efficiently allocation of limited capacity on a wireless network based on priority access, and would have applied Chuah's novel use of the priority-based quality of service in CDMA communication into Joseph's teaching of the priority access and channel assignment to designated subscribers. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Chuah's method for admitting new connections based on usage priorities in a multiple access system for communications networks into Joseph's system and method for providing priority access and channel assignment in a cellular telecommunication system with the motivation being to provide a method and system for allocating network access on a

wireless network according to a selected transmission priority level.

6. Claims 14-22 and 24-25 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Joseph et al. (US#5,574,977) in view of Chuah (US#6,226,277) as applied to the claims above, and further in view of Scholefield et al. (US#5,752,193).

Regarding to claims 14-22 and 24-25, Joseph and Chuah disclose the claimed limitations discussed in paragraph 5 above. However, Joseph et al. and Chuah do not expressly disclose the claimed feature of a control message to be transmitted to the wireless network to request transmission of a transaction, including an identification code for the wireless communication device and a priority level associated with the transaction.

In the same field of endeavor, Scholefield et al. teaches a system for allocating one or more subchannels based on priority of user data. After receiving a control message including a current priority service level message from a base station (*the control message including an identification code for the wireless communication device and a priority level associated with the transaction*), a subscriber unit determines whether or not to send an access request for one or more subchannels. Upon receipt of an allocation/access request, the system infrastructure determines from the access request whether to allocate the subchannel(s) to the subscriber unit. Periodically further access requests are received and scheduled and, when a higher priority message is received, completion of a lower priority message is deferred and the higher priority request allowed to proceed. Thus, an improved, access procedure is provided that allows for quicker access times as the priority of the data traffic increases See Figs. 1 & 7; (Col. 2, lines 59

plus and Col. 7, lines 49 plus).

One skilled in the art would have recognized the need for effectively and efficiently allocation of limited capacity on a wireless network according to the quality of service, and would have applied Scholefield's control message including the priority level, and Chuah's novel use of the priority-based quality of service in CDMA communication into Joseph's teaching of the priority access and channel assignment to designated subscribers. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Scholefield's method and apparatus for communicating in a wireless communication system, and Chuah's method for admitting new connections based on usage priorities in a multiple access system for communications networks into Joseph's system and method for providing priority access and channel assignment in a cellular telecommunication system with the motivation being to provide a method and system for policing pricing wireless communications services on a wireless network according to a selected transmission priority level.

***Allowable Subject Matter***

7. Claims 30, 32-35 and 38-47 are allowable.
8. The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest the steps of receiving an authorization message to transmit transaction data/email communication



data over the wireless network, and transmitting transaction data/email communication data from the data buffer corresponding to the authorized transaction until the wireless communications device either completes the transmission of the transaction or receives a notification from the wireless network to discontinue transmission, as recited in claims 30 and 38; wherein transmitting data packets at the predetermined rate between the wireless communications device and a voice communications server on the access link, and transmitting data packets from other wireless communications transactions on the access link during periods of time when there are gaps in the transmission of the communication, and suspending transmission of the data packets when a request is received for a wireless communication transaction that is at a higher priority level than the voice communication being transmitted, as specifically recited in claim 43; wherein the communications manager requests transmission of a discontinued transaction after receiving a signal from the wireless network that there is capacity for a transaction having a lower or same priority as the discontinued transaction, as specifically recited in claim 47.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Ueda (US#6,009,331) is cited to show the communication system having means for enabling channel assignment to calling terminal according to priority.

The Solondz (US#6,192,248) is cited to show the service cusmatization in a wireless communication system.

The Solondz (US#5,615,249) is cited to show the service prioritization in a cellular telephone system.

The Dalal (US#6,321,093) is cited to show the system and method for controlling priority calls in a wireless network.

The Chuah (US#6,377,548) is cited to show the method for admitting new connections based on measured quantities in a multiple access system for communications networks.

The Chuah (US#6,567,416) is cited to show the method for access control in a multiple access system for communications networks.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (703)305-1029. The examiner can normally be reached on Mon - Fri from 6:30 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu, can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:** (703) 305-9051, (for formal communications intended for entry)

**Or:** (703) 305-3988 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Mphan.

02/16/2004

*Man u. phan*  
MAN PHAN  
PATENT EXAMINER